

Cont
B1

3 a via-hole through the semiconductor substrate, the via-hole having a metal film on
4 an inside wall;

5 a wiring metal layer formed in a spiral pattern with an inside end on the
6 semiconductor substrate, the wiring metal layer being electrically connected to the via-hole at the
7 inside end;

8 an inductor of metal film formed in a spiral pattern with an inside end on the wiring
9 metal layer with the inside end of the inductor film being near the via-hole; and

10 a dielectric layer between the spiral wiring metal layer and the spiral inductor metal
11 film.

1 9. (Amended) An RF choke used in at least one of a matching circuit and a bias
2 feeding circuit, both circuits being included in an RF amplifier, the RF choke comprising:

3 a semiconductor substrate where at least one of the matching circuit and the bias
4 feeding circuit is incorporated;

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5 a via-hole through the semiconductor substrate, the via-hole having a metal film on
6 an inside wall;

7 a wiring metal layer formed in a spiral pattern with an inside end on the
8 semiconductor substrate, the wiring metal layer being electrically connected to the via-hole at the
9 inside end;

10 an inductor of metal film formed in a spiral pattern with an inside end on the wiring
11 metal layer with the inside end of the inductor film being near the via-hole; and

12 a dielectric layer between the spiral wiring metal layer and the spiral inductor metal
13 film.
